Morning Report: an educational tool

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Outline

- History of the morning report sessions
- Basic structure of a morning report session
- Purpose of morning report
- Organization of morning report
- Instructional methods
- Educational outcomes
- Innovations in morning report

Disclosure

- I have no conflict of interest to declare

History of the morning report sessions

- Historically, morning report probably was created to meet the demands of the hierarchical systems of public hospitals
- In many cases, there were no ward attendings, and the chief of service had to ensure the health and safety of all the patients
- Both the purpose and the audience of morning report have evolved over the years, and morning report is now conducted for diverse purposes with a wide variety of audiences.

Basic structure of a morning report session

- Morning Report is a morning teaching round for medical housestaff
- An interactive case-based teaching session with a long tradition in North American academic hospitals
- Residents rank morning report as the most important educational activity of their residency training
- The content and time of the round vary between institutions
- The round may occur at the beginning of the workday, or may occur after or in the middle of patient care rounds
- The participants in the round vary as well, but usually include all housestaff, the attending physicians on service, the chief medical resident, and other attendees

Basic structure of a morning report session

- In a typical morning report, the team on duty during the night presents recently admitted patients, followed by a general discussion of the cases and related topics
- Rounds are typically led by an attending physician or by the chief medical resident
- A case is presented, usually from a member of the admitting housestaff from the previous night
- The case is discussed in the Socratic manner, with focused questions addressed to the housestaff
- The management decisions from the previous night are usually discussed

What is the Socratic method?

- AKA Socratic debate
- A form of cooperative argumentative dialogue between individuals, based on asking and answering questions to stimulate critical thinking and to draw out ideas and underlying presumptions.
- It is a dialectical method, often involving a discussion in which the defense of one point of view is questioned; one participant may lead another to contradict themselves in some way, thus weakening the defender's point. This method is introduced by Socrates
- Aristotle attributed to Socrates the discovery of the method of definition and induction, which he regarded as the essence of the scientific method.

Objectives of Morning Report

- An “exercise” of encoding diagnosis based on the symptoms given by the patient
- An exercise of differential diagnosis, one of the “prides” of internal medicine specialists
- The presenting team should stick to the real presentation of the case, without “hiding” information
- It is OK to hold information until requested by the audience

Objectives of Morning Report

- The goal is to learn from difficult and atypical patients but also to go over basic cases

- The most valuable experience acquired in the morning report:
  - the approach to symptoms
  - the analysis and synthesis of physical and laboratory findings
  - following the most cost effective sequence

- Arriving at the right final diagnosis is, of course, ideal

H& P Format for Morning Report

Chief Complaint: Pick one only, the one that will guide your case presentation. It's OK to edit the patient's words sometimes to make it more understandable e.g. patient might say "my kidneys hurt" it's OK to say "Back or Flank Pain". Look at ER triage sheet and see if that chief complaint makes sense. **State duration of the complaint** using time of admission as reference point. With this alone the discussion can start.

HPI: Start with the phrase: Age ____ year old male/female with history of (give up to three maximum chronic conditions relevant to patient's condition). *The patient was in his/her usual state of health until _____ (hours/days/months) prior to admission when he/she experienced the _____(sudden/gradual) onset of _____*. Then proceed to explain all the elements of the chief complaint be it pain, dyspnea, etc… Here you also need to add the Review of System of the affected system e.g. if cc is chest pain, include palpitations, dyspnea, exercise tolerance positives and negatives. Here you also ask questions to prove or disprove particular diagnosis mainly the most "dreaded" ones "diagnostic imperatives" that would kill or complicate your patient e.g. if cc was Headache, you could say "denied this being the worse headache of his/her life" which is commonly used to describe Subarachnoid Hemorrhage.

Past Medical History: Here you enumerate the diagnosis that the patient carries. Make sure you correlate with the medications he/she is taking e.g. if patient takes Levothyroxine, make sure Hypothyroidism is listed. When giving diagnosis such as chronic conditions such as Diabetes, Hypertension, CAD, CHF, HIV/AIDS, it is expected to have a description of the duration of these conditions, presence of complications if known or unknown and some indicators of their control i.e. Last A1c, CBG's, BP numbers, Ejection Fraction if known, last stress test results if known, last viral load/CD4 count. Find out who their PCP is.

Past Surgeries: name of procedure and reason for it. If possible dates and locations

Allergies: state drug name and reaction and how long ago this happened.

Medications: use generics when possible with doses and frequency. Know reason why a med is given.

Social History: occupation is very important, even if currently unemployed or retired, list the occupation by trade. It's useful to mention where patients come from, if not from El Paso. Describe use of tobacco, alcohol and "recreational" drugs. Last use, amounts and for how long. If they quit, state reason why they quit. Living situation e.g. single living alone, etc… Pets and if they are sick or not. If possible calculate alcohol intake in grams for the number of years used. If available here you can mention hobbies if ther are pertinent. Mention diet and caloric intake if possible

Family History: Know conditions that killed parents, ages and ask in particularly about Premature Coronary Artery Disease and any similar conditions currently affecting patient e.g DM, HTN, CAD, Cholesterol. It is OK to present a genealogical tree if appropriate.

Review of Systems: Here you ask for at least 4 elements of every system x 12 systems. If it is already mentioned in HPI, you can say as per HPI. At the end always mention all others systems reviewed and found to be negative (if the patient stated that he/she did not have any other complaints)

Physical Exam:

General Examination: It's OK to start with a opening statement describing general status of patient e.g. "Patient alert, oriented x 3 and in no acute distress, sitting on his hospital bed"

-Then give **Vital Signs**, add Pulse OX with amount of Oxygen received and Weight if known from ER admission sheet and **BMI.**

Always follow the sequence: INSPECTION, PALPATION, PERCUSSION AND AUSCULTATION at the end.

HEENT:
Neck:

Chest: Lungs and heart. If describing a murmur be specific with location, intensity, radiation, response to maneuvers.

Back:

Abdomen: Here it's OK to auscultate before palpating and percussing.

Genitalia and rectal exam:

Extremities:

Neurological: Cranial nerves, motor, sensory, DTR's and cerebellar

Chest XRay: it's part of the physical exam and it rules out emergent diagnosis e.g. Pneumothorax, Dissecting Aortic Aneurysms

Laboratory presentation: Sequence of CBC and diff, BMP, LFT's, Cardiac Enzymes, BNP, A1C, TSH Urinalysis. ABG's if available.

EKG: Follow a systematic approach: rate, rhythm, axis, ST and T waves and PR and QTc intervals

Other imaging studies:

Additional slides: Hospital course if needed

Purpose of morning report

- Education
- Evaluation of Residents and Quality of Services
- Detection and Reporting of Adverse Event
- Non-medical issues
- Social Interaction

Education

- case-based teaching
- reviewing and planning patient management
- fostering presentation skills
- highlighting the unique approach of the generalist physician
- developing intellectual curiosity and research
- promoting decision-making skills
- self-directed learning
- to teach residents selected topics that are not usually part of the curriculum such as ethics

- Case-oriented teaching is the most frequently cited educational purpose of morning reports

Evaluation of Residents and Quality of Services

- Residents' attitudes
- Clinical skills
- Quality of care

Detection and Reporting of Adverse Event

- A pharmacy intern regularly attends morning report and considers whether admissions are related to medication problems
- Adverse drug reactions are discussed in the business portion of morning report and are later review by the Pharmacy and Therapeutic Committee
- An effective means to detect and report adverse events such as drug reactions

Non-medical issues

- Social
- Personal
- Ethical
- Political
- Economic topics
- Cost-effectiveness
- Administrative matters

Social Interaction

- An opportunity for residents and faculty to socialize
- An important social event for both residents and faculty
- Serve food and drinks during morning report and conduct business in an informal atmosphere that fosters social interaction

Organization of morning report

- Frequency, Time, and Duration
- Participants, Leadership, and Tone
- Case Selection and Presentation
- Record Keeping
- Patient Follow Up

Frequency, Time, and Duration

- Held on a regularly scheduled basis
- 80% of internal medicine programs holding morning report five times or more a week
- Only a handful of programs held morning report less than three times a week
- Usually begins before 9 AM
- Lasts for an hour
- In most programs, work rounds precede morning report to facilitate data collection prior to morning report
- Schiffman et al. argues that conducting morning report after ward rounds may be more useful because attending physicians can contribute significantly to the quality of the session

Participants

- The chief of medicine or the director of medical education is present in more than half of the sessions
- Third-year service residents are the most regular participants
- The presence of first-year residents varies, with about 60% of the programs requiring their participation on a regular basis
- Gross et al. reported that internal medicine residents prefer the presence of generalist physicians at morning report, possibly because of the renewed interest in general internal medicine
- Carruthers described an Australian program where general practitioners from the community regularly attended morning report
- Would lead to a better understanding of the strengths and weaknesses of general practice

Participants

- The presence of non-physician participants helps to broaden the scope of knowledge and experience of the residents
  - Pharmacists
    - increased the detection of adverse drug reactions
  - Librarians
    - the use of online searches by residents

- Some have argued against the presence of non-service personnel, junior residents, or medical students at morning report
  - their presence might inhibit the spontaneity of case presentation and discussion

Leadership

- The person leading morning report is either a faculty member (70%) or a chief resident (30%)

- Many openly criticize the role of the leaders and the tone they set during morning report:
  - Comments such as "morning retort or morning distort," "where bottom line is style above substance," and "secretive closed-door session" are reported frequently.
  - "... Housestaff defining and defending mishaps using mechanisms such as denials, discounting, and distancing."

Tone

- verbal interactions:
  - Consistently show that participants tend to be rigid in their roles and in their ways of asking for or providing information
  - Most of the information exchanged is low-level factual information
  - Few questions are asked that required synthesis of patient information and medical knowledge

Case Selection and Presentation

- Reflecting most often the chief resident's or attending physician's preferences
- Varies from brief presentations of all cases with equal emphasis on each case to elaborate presentations of one or two "interesting" cases
- Times allot for each case presentation varies widely
- Other unorthodox methods of case selection and presentation include:
  - the selection of cases one to two days in advance
  - the selection of simple cases at the beginning of the academic year and more complex ones later in the year
  - the presentation of cases prior to discharge

Record Keeping

- For educational purposes, such as:
  - the evaluation of content coverage
  - patient follow-ups
  - as data sources for research

- The availability of computers enables many programs to use the data from morning report for a variety of purposes

- In clinical research and quality assurance

Patient Follow Up

- Significant numbers of patients are not diagnosed at the time of presentation at morning report

- Provision of patient follow-up in morning report is important to maximize education

Instructional methods

- The most frequent:
  - case-based presentation, followed by discussion
- The chairman and chief resident would meet prior to morning report to review cases and preselect critical points for discussion
- Some shortcomings of case-based presentations have been addressed through innovative methods such as
  - the presentation of prepared topics,
  - photographic materials,
  - learner-centered learning approaches:
    - the residents would determine the goals of the session once the cases are presented and then formulate questions based on these goals
- learners should be creative and try new approaches

Instructional methods

- Two main orientations in terms of educational focus:
  - need to increase the residents' knowledge level
  - need to improve their problem-solving and data-gathering skills

- Importance of learning the process of information gathering and analysis rather than simply acquiring content knowledge

Educational outcomes

- Resulted in subsequent reductions in lengths of stay and controllable costs (Wartman)
- Described a model of morning report that resulted in less test ordering and fewer requests for consults. (Mehler et al.)
- Introduced changes in morning report—such as presentation of articles, comments by specialists, a computer database, and regular follow-ups—that improved the level of discussion and generated data for research (Bassiri et al.)

Educational outcomes

- Both quizzes and mini-lectures increased learning, although the quiz format resulted in better information retention (Potyk et al.)
- Radiology slides at pediatrics morning as a means of increasing residents' interest (D'Allessandro and D'Allessandro)
- Covered a broad range of topics included in published curricula (several authors)

Innovations in morning report

- Recently, there has been renewed interest in initiatives aimed at improving the educational value of morning report

- Such innovations include:
  - the use of techniques to promote collaborative problem solving
  - e-mails to expand on content related to the session
  - simultaneous literature searches with the support of a medical librarian
  - the application of a structured matrix to analyze cases

Morning Report Blog

- Web log ("blog") as an educational complement to morning report sessions at teaching hospitals

- A morning report blog is created using a free online tool
  - http://www.blogger.com

- Updated by Chief Medical Residents on average three times per week with items relevant to recent morning reports, such as medical content, links to pertinent literature, or medical images

- A confidential e-mail was sent to morning report attendees and included a brief description of the case along with a link to the blog
- The blog entries did not contain any identifiable patient content
- http://morningreporttwh.blogspot.com
- http://morningreporttgh.blogspot.com

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